

ON SOME LAND AND FRESH-WATER MOLLUSCA FROM SUMATRA.
PART II.¹

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THE shells catalogued and described in this communication have come to hand direct from Sumatra since November, 1905. I list them all, as some of the localities are probably new or unknown hitherto.

1. *ARIOPHANTA GRANARIA* (Bock).

Hab.—Mount Sago and Mount Ophir.

One specimen has the umbilicus completely covered by a membrane, a quite unusual feature.

Two specimens are young and show very marked features, differing from the adult form, especially in coloration.

2. *ARIOPHANTA MAARSEVEENI* (Bock).

Hab.—Mount Sago.

3. *ARIOPHANTA (DYAKIA) SMITHIANA*, Gude.

Hab.—Mount Sago.

4. *HEMIPLECTA DENSE* (Ad. & Reeve).

Syn. *Helix Schumacheriana*, Busch.

Hab.—Mount Sago, Mount Talang, and Bangkinan.

The specimen from Bangkinan is immature.

I have specimens also from the Malay peninsula sent by Mr. Abraham Hale.

5. *XESTA GLUTINOSA* (Metc.).

Hab.—Mount Sago.

6. *CHLORITIS TABULARIS*, Gude.

Hab.—Mount Ophir.

7. *EVERETTIA MALACCANA* (Pfr.).

Hab.—Mount Sago.

8. *GANESELLA CONULUS* (von Marts.).

Hab.—Mount Bongson.

9. *AMPHIDROMUS SUSPECTUS*, von Marts.

Hab.—Mount Ophir.

10. *OPEAS* sp.

Hab.—Loeboek Bangko.

Allied to *brevis*, Smith. Most probably a variety merely, and not needing a varietal name. The ova are still within the shells.

¹ Part I, see Proc. Malac. Soc., vol. vii, pp. 12-16, pl. ii.

11, *CLAUSILIA SUMATRANA*, Martens; and 12, *C. ROBUSTIOR*, n.sp.

Dr. E. von Martens¹ described two forms of his *Clausilia Sumatrana*, which he termed var. *a* and var. *b*. He did not, however, give them the varietal names, *attenuata* and *brevior*, as stated by Mr. Sykes,² those being merely the first words of the descriptions respectively. I have never seen such a large specimen ($31\frac{1}{2}$ mm. in length) of the var. *a*, as described by Martens, the largest example that has come under my notice being only 30 mm. long, the actual length of Martens' figure. When placed side by side with the var. *b* (hereafter named *robustior*) I cannot believe that they belong to the same species, the form is so very unlike, and the number of whorls is constantly different, judging from the specimens examined. The large example above referred to, from Mount Sago, has $11\frac{1}{2}$ whorls, which are peculiar on account of their exceptional flatness. This, however, may partly be due to attrition. It also presents a very remarkable



abnormality of the peristome in the form of a loop at the termination of the lamella superior. This irregularity of growth is doubtless due to an accident, as evidences of a fracture of the lip at this point are observable. It is, however, so very peculiar that I have thought it worth figuring. The sculpture of the body-whorl, which is only slightly worn, is not quite similar to that of the short form (var. *b*), being a trifle coarser, but the 5 plicæ suturales, which vary in number from 5-7 in the short variety, are of the same character exactly.

Three other examples of this species from Loeboek Bangko are intermediate in size between vars. *a* and *b*, being 25 mm. in length, and consist of $10-10\frac{1}{2}$ whorls. They are conspicuously more slender than var. *b* (*robustior*) and the spire more tapering, but in sculpture and with regard to the plicæ they are almost similar, the former, however, being *coarser*, as in the large abnormal specimen from Mount Sago.

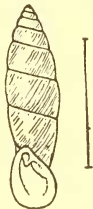
¹ Preuss. Exped. Ost-Asien, Zool., vol. ii, p. 379, pl. xxii, figs. 17-17c.

² Proc. Malac. Soc., vol. i, p. 28.

Var. *vicaria*.

A single small specimen from Mount Singalong, 16 mm. in length, 3.75 wide, of a dark purple-brown colour, with a white peristome, and consisting of $9\frac{1}{2}$ whorls.

Placing this shell beside var. *a* or var. *b*, the great difference of size seems to indicate more than varietal rank; indeed, although up to the present it has appeared advisable to regard these in the light of varieties of a single species, it seems more than likely, when their range is known and the animals studied, both alive and anatomically, that differences will be discovered by which we shall be enabled to distinguish them specifically. It may be that we are really dealing with two, if not three, distinct species, namely, var. *a*, which should be regarded as typical *Sumatrana*, var. *b*, which would require a name, *brevior* being already in use, and var. *vicaria*, a name which it might retain as a species. At present, however, I am certainly of opinion that the so-called var. *b* should be considered a distinct species from the rest, its form being *very different*, the whorls only $8\frac{1}{2}$ in



number, and the sculpture finer. For this shell I therefore propose the name *Clausilia robustior*. A specimen in the Natural History Museum is marked Kepahiang.

The var. *vicaria* of Sykes should, I think, at present be regarded as a variety of *Sumatrana*, for, although it is more glossy and smaller, still the sculpture is of about the same strength, and the form and proportions of the shell are similar.

In conclusion, I would refer to the relative proportional length of the two last whorls compared with the rest of the spire. In *robustior* the upper part¹ occupies about $\frac{1}{3}$ of the entire length, whereas in *Sumatrana* and var. *vicaria* it occupies just $\frac{2}{3}$, and in the abnormal specimen, above described, the length of the two parts of the shell is 14 and 16 mm. respectively.

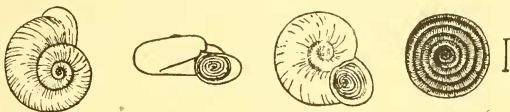
I have placed the specimens mentioned in this note in the Natural History Museum, South Kensington, so that they will always be available for future reference.

¹ The portion above the second suture, the aperture being towards the eye.

13. *PTEROCYCLUS ASPERSUS*, n.sp.

Testa discoidalis, aperte umbilicata, ad apicem subelata, sordide albida, supra fusco-purpureo tineta; anfractus $4\frac{1}{2}$ satis rotundati, sutura profunda discreti, striis incrementi obliquis sculpti, ultimus antice descendens; peristoma duplex, margine exteriori late expanso, tenui, albo, continuo, anfractui conjuncto, interno tenui, continuo; operculum corneum, tenue, spiraliter carinatum, anfractibus circiter 9 transversim striatis. Diam. maj. 19, min. 14.5 mm.; alt. 9 mm. Apertura intus 6 mm.

Hab.—Loeboek Bangko.



The adult specimens are denuded of periostracum, and are coloured as described above, but an immature specimen consisting of three whorls and probably belonging to this species, is yellowish, copiously blotched above and below with rich brown markings, and it also exhibits a somewhat broken-up peripheral zone. Under a strong lens the protoconch is beautifully spirally punctate. The centre of the operculum, which is concave, is also very finely spirally striated.

14. *LEPTOPOMA FULTONI*, Aldrich.

Hab.—Bongsoe.

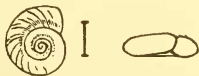
15. *ISIDORA (BULINUS) SUMATRANA*, von Marts.

Hab.—Mount Ophir.

Four examples possess seven whorls, and are large and well developed; four possess six only, and two of these are stunted specimens.

16. *PLANORBIS SAGOENSIS*, n.sp.

Testa orbicularis, depressa, subcarinata, pallide luteo-cornea, lineis incrementi obliquis tenuibus sculpta; anfractus $3\frac{1}{2}$ superne convexi,

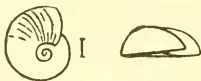


inferne sub-convexi; apex depressus; umbilicus satis depressus; apertura oblique lunata, ad peripheriam subangularis. Diam. max. 6, min. 5 mm.; alt. 2 mm.

Hab.—Mount Sago.

17. *SEGMENTINA KENNARDI*, n.sp.

Testa tenuis, discoidalis, compressa, carinata, brunneo-cornea, subpellucida, septis internis instructa; apex modice depressus; latus



inferius planum, in regione umbilici leviter impressum; anfractus 3, ultimus superne subrotundatus; apertura acute lunata. Diam. 2.5, alt. 1 mm.

Hab.—Mount Singalong.

The periostracum is somewhat masked by iron deposit.

18. *MELANIA TUBERCVLATA* (Müll.).

Hab.—River at Souliki.

19. *MELANIA UNIFASCIATA*, MOUSS.

Hab.—Mount Merapi and river at Souliki.

20. *MELANIA CURVICOSTA*, von Marts., var. *PRESTONIANA*, Bullen.

Hab.—Mount Merapi.

21. *CORBICULA SUBROSTRATA*, Bullen.

Hab.—River Kwantan.

Originally described from Java. This is an interesting extension of its habitat.

In conclusion I beg to return my thanks to Mr. E. A. Smith for much kind help, especially in connection with the *Clausilia*.